



PATENT  
TH2229 (US)  
DFH:EM

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Donald F. Haas  
Date: July 25, 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of )  
PAUL M. AYOUB, STEVEN C. SUMROW, )  
HENK DIRKZWAGER, and )  
BRENDAN D. MURRAY )  
Serial No. 10/772,023 ) Group Art Unit: 1764  
Filed February 4, 2004 ) Examiner: John Christopher Douglas  
METHODS OF PREPARING BRANCHED ) July 25, 2006  
ALKYL AROMATIC HYDROCARBONS )  
\_\_\_\_\_  
)

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

FEE AND INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR 1.56 AND 1.97

It is respectfully requested that the documents listed on the attached Form PTO-1449 be considered by the Patent and Trademark Office in the above-entitled application and made of record therein. Full text copies of the relevant documents are enclosed.

The Examiner is requested to indicate consideration of this art on the attached PTO-1449 (Modified) by initialing next to each item submitted by the Applicant.

FEE

The Commissioner is hereby authorized to charge to Deposit Account No. 19-1800, the fee associated with the filing of this Information Disclosure Statement.

Respectfully submitted,

PAUL M. AYOUB, STEVEN C. SUMROW,  
HENK DIRKZWAGER, and  
BRENDAN D. MURRAY

By

Attorney, Donald F. Haas  
Registration No. 26,177  
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P.O. Box 2463  
Houston, Texas 77252-2463

FORM PTO-1449 (Modified)

ATTY. DOCKET NO.  
TH2229 APPLICATION NUMBER  
10/772,023

LIST OF INFORMATION PROVIDED  
BY APPLICANT  
(Use several sheets if necessary)

APPLICANT  
P. M. Ayoub et al.FILING DATE  
February 4, 2004GROUP ART UNIT  
1764

## REFERENCE DESIGNATION

PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	AA	4,438,287	3/20/84	Imai	568	909	
	AB	3,907,909	9/23/75	Maculuso Sr. et al.	260	632 HF	
	AC	5,849,960	12/15/98	Singleton et al.	568	909	
	AD	2002/0004621	1/10/02	Xu et al.	585	260	
	AE	2002/0087040	7/4/02	Marchionna et al.	585	331	
	AF	6,414,199	7/2/02	Saruwatari	68	728	
	AG	2,930,763	3/29/60	Haensel	252	441	
	AH	6,150,322	11/21/00	Singleton et al.	510	426	
	AI	6,737,553	5/18/04	Maas et al.	568	909	

## FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation Yes	No
	AL	1,601,818	6/27/77	Great Britain	C07C	31/02		
	AM	0,668,342	8/23/94	Europe	C01B	33/28		
	AN	0,211,381 A1	2/25/87	Europe	C07C	7/163		
	AO	00/12451	3/9/00	World	C07C	7/13		

## OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

AR	"Sasol Detergent Alcohols," Preliminary Sasol R&D Technical Bulletin, 25 November 1996, pp. 1-13, XP002932342
AS	Flanigen et al., "Aluminophosphate Molecular Sieves and the Periodic Table," New Developments in Zeolite Science Technology, 1986, Kodansha Ltd., Tokyo, Japan, pp. 103-112
AT	"Alcohols, Higher Aliphatic," Kirk Othmer Encyclopedia of Chemical Technology, 2000, Fourth Edition, John Wiley & Sons, pp. 865-913

EXAMINER

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LIST OF INFORMATION PROVIDED BY APPLICANT			APPLICANT P. M. Ayoub et al.			
(Use several sheets if necessary)			FILING DATE February 4, 2004	GROUP ART UNIT 1764		

REFERENCE DESIGNATION		U.S. PATENT DOCUMENTS					
Examiner Initial		Document Number	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	BA	6,008,181	12/28/99	Cripe et al.	510	426	
	BB	6,015,781	1/18/00	Vinson et al.	510	302	
	BC	6,020,303	2/1/00	Cripe et al.	510	503	
	BD	6,046,152	4/4/00	Vinson et al.	510	428	
	BE	6,060,443	5/9/00	Cripe et al.	510	426	
	BF	6,087,309	7/11/00	Vinson et al.	510	125	
	BG	6,133,222	10/17/00	Vinson et al.	510	428	
	BH	6,320,080	11/20/01	Connor	568	28	
	BI	6,326,348	12/4/01	Vinson et al.	510	428	

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation Yes      No
	BL	0,055,529	7/7/82	Europe	C01B	33/34	
	BM	0,103,981	3/28/84	Europe	C01B	33/28	
	BN	0,583,836	2/23/94	Europe	C10G	65/12	
	BO						

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)		
	BR	Edward J. Wickson, Editor, "Monohydric Alcohols; Manufacture, Applications and Chemistry," American Chemical Society Symposium Series 159, 1981, pp. 72-164
	BS	
	BT	

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			APPLICANT P. M. Ayoub et al.				
			FILING DATE February 4, 2004		GROUP ART UNIT 1764		
REFERENCE DESIGNATION			U.S. PATENT DOCUMENTS				
Examiner Initial		Document Number	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	CA	6,433,207	8/13/02	Connor	558	31	
	CB	5,780,694	7/14/98	Singleton	568	909	
	CC	2003/0120118	6/26/03	Betts et al.	568	451	
	CD	3,442,965	5/6/69	Oldham	260	671	
	CE	6,388,162	5/14/02	Himelfarb et al.	585	809	
	CF	6,765,106	7/20/04	Fenouil et al.	558	41	
	CG	6,492,568	12/10/02	Murray et al.	568	909	
	CH	5,112,519	5/12/92	Giacobbe et al.	252	174.21	
	CI	6,222,077	4/24/01	Singleton	568	909	
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation <u>Yes</u> <u>No</u>
	CL						
	CM						
	CN						
	CO						
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)							
	CR						
	CS						
	CT						
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Examiner Initial		Document Number	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	DA	5,849,960	12/15/98	Singleton et al.	568	909	
	DB	6,150,322	11/21/00	Singleton et al.	510	426	
	DC	2,620,314	12/2/52	Hoekstra	252	448	
	DD	3,231,621	1/25/66	Slaugh	260	604	
	DE	3,239,566	3/8/66	Slaugh	260	604	
	DF	3,239,569	3/8/66	Slaugh	260	632	
	DG	3,239,570	3/8/66	Slaugh	260	632	
	DH	3,239,571	3/8/66	Slaugh	260	632	
	DI	3,274,287	9/20/66	Moore et al.	260	683.3	
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation Yes      No
	DL						
	DM						
	DN						
	DO						
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)							
	DR						
	DS						
	DT						
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REFERENCE DESIGNATION		U.S. PATENT DOCUMENTS					
Examiner Initial		Document Number	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	EA	3,315,007	4/18/67	Abell, Jr. et al.	260	683.3	
	EB	3,315,008	4/18/67	Abell, Jr. et al.	260	683.3	
	EC	3,400,163	9/3/68	Mason et al.	260	606.5	
	ED	3,420,875	1/7/69	DiSalvo et al.	260	513	
	EE	3,420,893	1/7/69	Faltings et al.	260	618	
	EF	3,428,654	2/18/69	Rubinfeld et al.	260	327	
	EG	3,440,291	4/22/69	Van Winkle et al.	260	632	
	EH	3,448,157	6/3/69	Slaugh et al.	260	604	
	EI	3,462,525	8/19/69	Levinsky	424	56	

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation Yes      No
	EL						
	EM						
	EN						
	EO						

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)		
	ER	
	ES	
	ET	

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Examiner Initial		Document Number	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	FA	3,488,158	1/6/70	Bentley et al.	23	258.5	
	FB	3,496,203	2/17/70	Morris et al.	260	439	
	FC	3,496,204	2/17/70	Morris et al.	260	439	
	FD	3,501,515	3/17/70	Van Winkle et al.	260	439	
	FE	3,506,580	4/14/70	Rubinfeld et al.	252	138	
	FF	3,527,818	9/8/70	Mason et al.	260	632	
	FG	3,676,523	7/11/72	Mason	260	683	
	FH	3,686,351	8/22/72	Mason	260	683.15	
	FI	3,737,475	6/5/73	Mason	260	683.15	
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document Number	Date	Country	Class	Subclass	<u>Translation</u> Yes      No
	FL						
	FM						
	FN						
	FO						
<b>OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)</b>							
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	FS						
	FT						
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Examiner Initial		Document Number	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	GA	3,745,112	7/10/73	Rausch	208	139	
	GB	3,579,537	5/18/71	Rubinfeld et al.	260	327	
	GC	4,016,245	4/5/77	Plank et al.	423	328	
	GD	4,020,121	4/26/77	Kister et al.	260	683.15	
	GE	4,251,499	2/17/81	Nanne et al.	423	329	
	GF	4,375,573	3/1/83	Young	585	467	
	GG	4,430,517	2/7/84	Imai et al.	585	660	
	GH	4,506,032	3/19/85	Imai et al.	502	223	
	GI	4,578,259	3/25/86	Morimoto et al.	423	329	

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation Yes      No
	GL						
	GM						
	GN						
	GO						

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	GS	
	GT	

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	HA	4,579,986	4/1/86	Sie	585	324	
	HB	4,795,623	1/3/89	Evans	423	328	
	HC	4,942,027	7/17/90	Evans	423	328	
	HD	5,012,021	4/30/91	Vora et al.	585	315	
	HE	5,112,519	5/12/92	Giacobbe et al.	252	174.21	
	HF	5,169,824	12/8/92	Saleh et al.	502	259	
	HG	5,276,990	1/11/94	Ramirez	43	17.5	
	HH	5,292,990	3/8/94	Kantner et al.	585	820	
	HI	5,371,308	12/6/94	Gosselink et al.	585	251	
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation Yes      No
	HL						
	HM						
	HN						
	HO						
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	HR						
	HS						
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Examiner Initial		Document Number	Date	Patentee	Class	Subclass	Filing Date if Appropriate
	IA	5,510,306	4/23/96	Murray	502	64	
	IB	5,648,584	7/15/97	Murray	585	666	
	IC	5,648,585	7/15/97	Murray et al.	585	671	
	ID	5,849,972	12/15/98	Vicari et al.	585	531	
	IE	5,985,238	11/16/99	Pasquale et al.	423	706	
	IF	6,150,322	11/21/00	Singleton et al.	510	426	
	IG	6,222,077	4/24/01	Singleton	568	909	
	IH	6,225,518	5/1/01	Sohn et al.	585	826	
	II	6,448,435	9/10/02	Jacobson et al.	562	39	
<b>FOREIGN PATENT DOCUMENTS</b>							
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	IL						
	IM						
	IN						
	IO						
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	JB	6,765,106	7/20/04	Fenouil et al.	558	41	
	JC	6,657,092	12/2/03	Dirkswager et al.	568	909	
	JD	6,770,191	8/3/04	Ansorge et al.	208	67	
	JE						
	JF						
	JG						
	JH						
	JI						

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		Document Number	Date	Country	Class	Subclass	Translation Yes      No
	JL						
	JM						
	JN						
	JO						

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JR	
JS	
JT	

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